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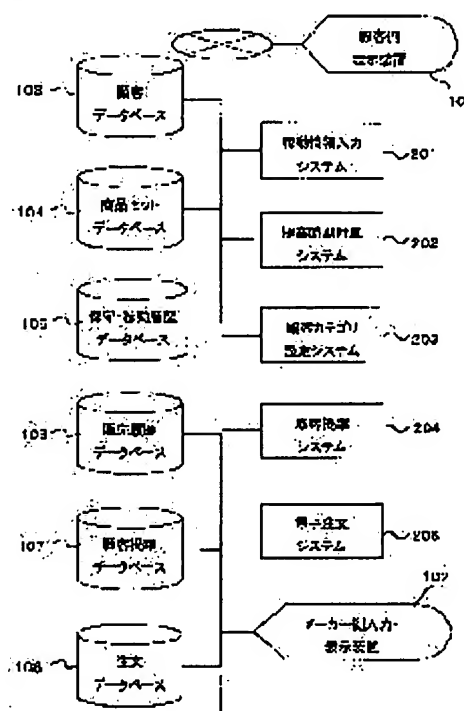
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(54) COMMODITY SALES METHOD AND COMMODITY SALES SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To predict the time of a customer requiring a commodity or part to early and surely make a proposal.

SOLUTION: A recommended combination of the parts or expendable supplies constituting a commodity delivered to the customer is preliminarily prepared every commodity for a part group of an influenced range every generable obstruction or superannuated part within the range capable of ensuring the connection between parts. The time requiring a replacement or supply is calculated from the accumulated maintenance cost of the commodity every customer or the lifetime and mean time between failures every trouble of each part constituting the commodity to predict an optimum proposing time, whereby the commodity, parts and expendable supplies are automatically proposed. The customers are classified to continuously ordering customers and other customers, the proposing method of commodity is varied between the both, complimentary services are proposed with the proposing method of commodity varied between the both, respectively. A discount price is calculated and presented to the continuously ordering customers to urge them to early perform the replacement of the commodity or parts and the supply of expendable supplies.



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EFFECT OF THE INVENTION

[Effect of the Invention] According to this invention, the burden which chooses the components for which a customer is needed from a catalog, and an article of consumption by preparing the combination of the components recommended beforehand or an article of consumption for every customer is mitigated. Moreover, by predicting the stage being needed and proposing at an early stage, the automatic proposal only of the information required for a required stage can be made, and before failure and superannuation occur, the purchase of goods, components, and an article of consumption and exchange can be proposed. On the occasion of a proposal, by the thing which classified and for which the proposal approach is changed for every customer, to the customer who has an order continuously, maintenance to the existing customer's company can be performed, and the estrangement to the other company can be protected now from its company to other customers. Moreover, a customer's purchase can be urged by enabling it to purchase goods, components, and an article of consumption by the low price, so that the rate of discount is set up and an order is placed at an early stage to the customer who has an order continuously, and it becomes possible to decrease failure generating by failure or superannuation beforehand.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]**[0001]**

[Field of the Invention] This invention relates to the sales method and selling system to a customer of the goods in subassembly selling business etc., the components which constitute goods, and an article of consumption, and relates to the goods sales method and goods selling system which are made into performing appropriately and automatically management of the combination of recommendation components and an article of consumption, count of the proposal stage to those customers and the goods proposal according to customer, and a price setup especially.

[0002]

[Description of the Prior Art] The approach of exhibiting the catalog of goods through the homepage on the Internet as the goods proposal approach to the conventional customer or the method of using an electronic mail for a customer's person in charge, and sending the catalog of goods to him is taken (JP,9-223175,A). When exhibiting the catalog of goods, the contents of the goods carried for every customer are changed, and the method of exhibiting only the goods set by a customer's taste is indicated by JP,8-329148,A. In JP,8-153283,A, the stage for which exchange of components and supplementation are needed is predicted by calculating from the life years of the operating experience of components, and components, and the approach of notifying a result to the staff which performs the parts replacement of its company is indicated. Moreover, the approach of connecting the target components group to JP,12-113259,A with an electronic means as an approach of collecting maintenance of goods and operation information, to the system which calculates exchange and a supplementation stage beforehand, and carrying out monitoring of the operation information is indicated.

[0003]

[Problem(s) to be Solved by the Invention] However, there are the following problems in the conventional approach. It is necessary to specify the failure and superannuation part which may be generated when treating components and an article of consumption as goods like the manufacture of a components assembly type, and to choose components and an article of consumption, and when a customer places an order, a big load is applied to choosing required components and a required article of consumption from a catalog. Moreover, the stage for which the proposal of goods is also needed by the customer is not taken into consideration, but the method of performing catalog public presentation and sending of an electronic mail at any time is taken. Although it is possible to calculate the components itself from the life years of the operating experience of components and components also when predicting exchange of components and a supplementation stage, predicting the exchange stage is not taken into consideration to the goods itself which is the aggregate of components. Moreover, a customer may cause trouble to business by the time difference to the delivery of goods of components by delay of communication to a customer etc. only by telling the person in charge of its company the prediction result of an exchange stage. When collecting maintenance of goods, and operation information, and the object which can collect operation information will be restricted by the approach of connecting the target components group with an electronic means, and carrying out monitoring of the operation

information, for example, component parts, such as a construction equipment and a plant, are considered, it is difficult to connect a components group with an electronic means.

[0004] The purpose of this invention solves the above conventional troubles, prepares the combination of the components recommended beforehand or an article of consumption for every customer, and is to make it possible the early stage in predicting the stage for which a customer needs it, and to ensure a proposal. Moreover, other purposes of this invention classify a customer and are to urge a customer's purchase by carrying out warm treatment service to the customer who classified and who performs an effective goods proposal for every customer, continues especially, and has an order.

[0005]

[Means for Solving the Problem] In this invention, said purpose is attained by constituting the system for goods sale combining a customer database, a goods set database, maintenance / operation hysteresis database, a selling hysteresis database, a customer proposal database, an order database, operation information input system, a proposal stage computing system, a customer category setting system, a customer proposed system, and an electronic order system.

[0006] First, it has the combination information on recommendation components and an article of consumption by setting and creating the goods set database which manages the information on the components which had the identification information of the goods delivered to the customer database which manages a customer's information, and matched the corresponding goods, and an article of consumption. The combination of recommendation components and an article of consumption is created by defining the group of the components group of the range out of which effect comes for every failure which may be generated, or superannuation part, and it has it in a goods set database. In operation information input system, when a failure occurs and maintenance is performed, failure data and maintenance data are inputted for every goods delivered to the customer, and it stores in maintenance / operation hysteresis database.

[0007] With reference to the selling hysteresis database which stores the selling hysteresis to the past customer, it classifies into the customer who has an order continuously, and the other customer according to a customer category setting system with reference to order spacing of goods, components, and an article of consumption, a category is set up, and it stores in a customer database. In a proposal stage computing system, in the case of goods, whenever it performed maintenance, an accumulation maintenance cost is calculated, the stage to exceed the threshold set up beforehand is calculated, and, in the case of components and an article of consumption, a parts replacement and the stage which needs article-of-consumption supplementation are calculated from the information on life years or Mean Time Between Failure (MTBF), and maintenance hysteresis and operation hysteresis. As a result of calculating, what is settled on the proposal dates within this month etc. set up beforehand is listed, and it stores in a customer proposal database.

[0008] In a customer proposed system, with reference to the contents of the customer proposal database, the information on the goods which exist at a proposal stage, components, and an article of consumption is acquired, an electronic mail is created, a meaning proposal number is given, and it transmits automatically to the person in charge by the side of a customer. In the case of the customer belonging to the category which has an order continuously, at this time, the electronic mail which performs a warm treatment service proposal is sent with reference to the category set up by the customer category setting system. In the case of the customer belonging to the other category, the electronic mail to which the warm treatment service proposal from the time of an order is urged next time is sent.

[0009] In an electronic order system, a customer logs in to a system using the proposal number indicated in the electronic mail, and performs an order of the goods which proposed by the homepage on the Internet created for every customer using the customer proposed system, components, and an article of consumption. Moreover, in the case of the customer belonging to the category which has an order continuously, it is setting up the rate of discount to goods, components, and an article of consumption, and storing in a customer proposal database based on the period between the day which received the order, and the order date called for by the proposal stage computing system, and it presents the discounted price.

[0010] Namely, maintenance of the goods which supplied the customer the goods sales method by this invention periodically and/or hysteresis information on a failure, The step which calculates the goods, components or article of consumption which should be exchanged or filled up based on the information about the durable years and/or the time between failures of components which constitute said goods and said goods, its exchange, or a supplementation stage, It is characterized by including the step which turns to a customer the information which proposes exchange or supplementation of said goods, components, or an article of consumption, and auto-sends it by E-mail on the day on which it decided based on exchange of the calculated goods, components, or an article of consumption or a supplementation stage.

[0011] You may make it an electronic mail contain the step which carries out a screen display of the detailed information and the order carbon button of a proposal to the customer ID of whom the customer is beforehand notified in the homepage of the Internet in response to the input of a proposal number, and the step which receives an order from the screen concerned including the link information to the homepage of a proposal number and the Internet.

[0012] The customer database which the goods selling system by this invention associates a customer name and the information on the goods supplied to the customer, and is managed, The goods set database which manages the information about the durable years and/or the time between failures of components which constitute goods and the goods concerned, Maintenance / operation information database which manages the hysteresis of the maintenance and/or failure over the goods delivered to the customer, The information on the goods periodically supplied to the customer with reference to the customer database is acquired. The goods which should be exchanged or filled up based on the information managed in the goods set database and maintenance / operation information database about the goods concerned, and the threshold information set up beforehand, The proposal stage computing system which calculates components or an article of consumption, its exchange, or a supplementation stage, It is characterized by having the customer proposed system which turns and auto-sends to a customer the information which proposes exchange or supplementation of goods, components, or an article of consumption on the day on which it decided based on the proposal stage calculated with the proposal stage computing system.

[0013] It can prepare beforehand in the range in which connection between the components group of the range affected for the components which constitute the goods and goods which were delivered to the customer according to this goods selling system, an article of consumption, or its proposed combination for every failure which may be generated, or superannuation part, and components is guaranteed, and can sell by proposing to a customer at the stage considered that exchange and supplementation are required.

[0014] A customer proposed system shall transmit the electronic mail containing the proposal about exchange or supplementation of goods, components, or an article of consumption, and a proposal number automatically to a customer. Moreover, it may have an electronic order system, and the electronic order system concerned may be constituted so that it may have the homepage of the Internet which changes on the screen which receives an order of the goods proposed while showing the detailed information of a proposal, when Customer ID and the proposal number of which the customer is notified beforehand were inputted, components, or an article of consumption.

[0015] Furthermore, the selling hysteresis database which manages the selling hysteresis of the goods to a customer, components, or an article of consumption, The goods from the selling hysteresis managed in the selling hysteresis database concerned, components, It has further the customer category setting system classified into the customer who continues a customer with reference to order spacing of an article of consumption, and has an order, and the other customer. A customer proposed system Warm treatment service is proposed to the customer who continues and has an order, and you may make it propose the warm treatment service from the time of purchase to the other customer next time.

[0016] As an example of the warm-treatment service which offers to the customer who continues and has an order, the rate of discount sets up based on the period between the day which received the order, and the order date calculated with the proposal stage computing system, and when logging in to an

electronic order system based on the proposal number to which the customer was sent from the customer proposed system, the service which shows in the discount price of the proposed goods, components, and an article of consumption is.

[0017]

[Embodiment of the Invention] Hereafter, a drawing explains the example of this invention to a detail. Drawing 1 is drawing showing the example of a configuration of the goods proposed system by this invention. This system consists of the followings. 101 is a customer side display with which a customer places an order with reference to the information on goods and recommendation components combination. 102 is the manufacturer side input and a display which inputs data, such as maintenance of goods, operation hysteresis information, and a rate of the maximum discount. 103 is a customer database which manages data delivered to the customer and the customer, such as information on goods, and a classification of a customer, a rate of the maximum discount. 104 is a goods set database which manages the information on the recommendation components combination of the goods delivered for every customer. 105 is maintenance / operation information database which manages the hysteresis of the maintenance and failure over the goods delivered to the customer. 106 is a selling hysteresis database which manages the selling hysteresis of the past to a customer. 107 is the goods which should be proposed to the customer who exists at a proposal stage, and a customer proposal database which manages the information on recommendation components combination. 108 is an order database which stores the ordering information from a customer. 201 is operation information input system which inputs maintenance of the goods delivered to the customer, and fault information. 202 is the goods and the components which should be exchanged and filled up from the durable years and maintenance cost of components, and a proposal stage computing system which calculates the exchange stage. 203 is a customer category setting system which classifies a customer from the selling hysteresis to the past customer, and sets up a category. 204 is a customer proposed system which proposes goods and recommendation components combination to a customer at the proposal stage calculated with the proposal stage computing system 202. 205 is an electronic order system which calculates the discount price to a customer and receives an order.

[0018] Drawing 2 shows the information managed by the customer database 103, and has managed customer information (a customer code, a customer name, address) and the goods information (bar code) delivered to the customer, the customer category set up for every customer, and the rate of the maximum discount. Drawing 3 shows the information managed in the goods set database 104, and consists of four tables and 104a-104d. 104a has managed the combination information (a components combination code, a components combination name, components combination price) on the components which should be exchanged when the failure (failure code) which may be generated in the delivered system, its Mean Time Between Failure, and a failure occur. 104b has managed the information on each part article which constitutes the combination of components (parts code). 104c has managed the years (life years) used as each part article and its life. 104d (a bar code, a goods name, goods price) of goods information is managed.

[0019] Drawing 4 shows the information managed in maintenance / operation hysteresis database 105, and consists of two tables, and 105a and 105b. 105a has managed the maintenance costs at the time of carrying out the delivery-of-goods date of the goods delivered to the customer, the maintenance implementation date at the time of carrying out maintenance, and maintenance, and the accumulation maintenance costs of old maintenance hysteresis. 105b has managed the failure generating date at the time of a failure occurring with the goods delivered to the customer, the generated fault information (failure code), and the combination information on the exchanged components (substitute part combination code).

[0020] Drawing 5 shows the information managed in the selling hysteresis database 106, and has managed an order-received date, order-received quantity, and the sum total order-received amount of money as selling hysteresis of the past to a customer. Drawing 6 shows the information managed in the customer proposal database 107, and has managed the failure generating anticipation date calculated with the bar code which should be proposed as the proposal number which identifies the goods or the

components combination which should be proposed, the components combination code, and the proposal stage computing system 202, and the transmitting date which transmitted the electronic mail of a proposal with the customer proposed system 204.

[0021] Drawing 7 shows the information managed in the order database 108, and has managed the bar code which received the proposal number and the order or the components combination code, and the order date. Drawing 8 is the flow chart of the processing in the operation information input system 201. When performing maintenance by the customer, a customer code, a bar code, a delivery-of-goods date, a maintenance implementation date, and maintenance costs are inputted, maintenance / operation database 105a is searched with the corresponding customer code and bar code, and the accumulation maintenance costs at the time of performing maintenance last time are acquired from a manufacturer side input and a display 102 (S12). The customer code which did its maintenance business of this (S13), and inputted it into these accumulation maintenance costs, a bar code, a delivery-of-goods date, a maintenance implementation date, maintenance costs, and the calculated accumulation maintenance costs are registered into maintenance / operation hysteresis database 105a (S14). When a failure occurs in a customer, from a manufacturer side input and a display 102, a customer code, a bar code, a failure generating date, a failure code, and a substitute part combination code are inputted, and the inputted information is registered into maintenance / operation hysteresis database 105b (S15).

[0022] Drawing 9, drawing 10, and drawing 11 are the flow charts of the processing in the proposal stage computing system 202 which calculates the proposal stage of components and an article of consumption to constitute goods and goods. When predicting the exchange stage of components, first, the customer code of the corresponding customer and a bar code are inputted, goods set database 104a is searched and the corresponding customer, the failure code of goods, Mean Time Between Failure, and a components combination code are acquired from a manufacturer side input and an indicating equipment 102 (S21). Next, it judges whether maintenance / operation hysteresis database 105b is searched with a customer code and a bar code (S22), and there are any corresponding failure data (S23). When there are corresponding failure data, the latest failure generating date is acquired, it is adding Mean Time Between Failure, and a next failure generating anticipation date is calculated (S24). When there are no corresponding failure data, maintenance / operation information database 105b is searched, about the failure which has not been generated yet, it is adding Mean Time Between Failure to a delivery-of-goods date, and a next failure generating anticipation date is calculated (S25).

[0023] Moreover, in case the maintenance implementation schedule date considered to perform maintenance next time is calculated, goods set database 104b is searched first, and the parts code which constitutes components combination is acquired (S26). Next, goods set database 104c is searched with the acquired parts code, and components with the minimum life years in the components which constitute components combination are acquired (S27). A next maintenance implementation schedule date is calculated by adding to the newest maintenance implementation date which searched maintenance / operation hysteresis database 105a, and acquired these minimum life years (S28). Finally, the exchange stage of components compares the failure generating anticipation date calculated at steps 24 and 25 with the maintenance implementation schedule date calculated at step 28, and serves as data of the nearer one (S29). Although this result is stored in the customer proposal database 107, first, the customer proposal database 107 is searched, the maximum of the proposal number by which current **** is carried out is acquired, and the result of having ****(ed) and (S30) calculated a new proposal number by adding 1 to it is stored in the customer proposal database 107 (S31).

[0024] Next, when predicting the exchange stage of goods, first, from a manufacturer side input and a display 102, the customer code of the corresponding customer and a bar code are inputted, maintenance / operation hysteresis database 105a is searched, and the hysteresis number of cases is acquired from the list of the corresponding customer and the maintenance hysteresis of goods (S41). Next, average maintenance costs are calculated by dividing the newest accumulation maintenance costs by the hysteresis number of cases, and next anticipation accumulation maintenance costs are calculated by adding this value to the newest accumulation maintenance costs (S42). As compared with the threshold of the accumulation maintenance costs which set up these anticipation accumulation maintenance costs

beforehand (S43), when not exceeding a threshold, processing is ended, when exceeding a threshold, the customer proposal database 107 is searched, the maximum of the proposal number by which current **** is carried out is acquired, and a new proposal number is ****(ed) by adding 1 to it (S44). Finally, it considers that the date of the beginning of the month next month is a failure generating anticipation date, a proposal number, a customer code, and a bar code are stored in the customer proposal database 107, and processing is ended (S45).

[0025] Drawing 12 is the flow chart of the processing in the customer category setting system 203. A customer code is inputted first, a customer database 103 is searched, and a current customer category is acquired (S51). This customer category judges whether it is a continuation order customer's category (S52), when that is not right, the selling hysteresis database 106 is searched, ***** which is a continuation order customer's category is ended, and the number of cases of the corresponding record is acquired (S53). Next, when comparing the threshold of the acquired number of cases and the count of an order received set up beforehand (S54) and not exceeding a threshold, a category is set up as a customer without a continuous order, and the record with which a customer database 103 corresponds a customer code to a key is updated (S55). On the other hand, when exceeding a threshold, a customer category and the rate of the maximum discount are set up as a customer who has an order continuously, and the record with which a customer database 103 corresponds a customer code to a key is updated (S56).

[0026] Drawing 13 is the flow chart of the processing in the customer proposed system 204. A customer proposal database is searched first and it acquires a record one affair at a time (S61). Next, the goods set databases 104a and 104d are searched with the bar code and components combination code which were acquired, and a goods name, a goods price, a components combination name, and a components combination price are acquired (S62). Next, the electronic mail of corresponding addressing to a customer is created, and a proposal number, the goods information which performs a proposal, and components combination information are indicated (S63). Moreover, a customer database 103 is searched, a customer category is acquired (S64), and it judges whether you are the customer who has an order continuously (S65). In being the customer who has an order continuously, the purport to which an electronic mail has warm treatment service is indicated, an electronic mail is transmitted (S66), and it sets a transmitting date as the customer proposal database 107 (S67). In the case of the customer who does not have an order continuously, the purport which has warm treatment service in an electronic mail from the time of an order next time is indicated, it transmits an electronic mail (S68), and sets a transmitting date as the customer proposal database 107 (S67).

[0027] Drawing 14 is the flow chart of the processing in an electronic order system. First, the customer proposal database 107 is searched based on the proposal number inputted from the customer side indicating equipment 101, and the corresponding record is acquired (S71). Next, the goods set databases 104a and 104d are searched with the bar code and components combination code which were acquired, and a goods name, a goods price, a components combination name, and a components combination price are acquired (S72). Similarly a customer database 103 is searched with the acquired customer code, and a customer category and the rate of the maximum discount are acquired (S73). Here, the days between the dates and the days between a failure generating anticipation date and a transmitting date are calculated on a failure generating anticipation date and the day, the former days are divided by the latter days (S74), and it asks for the rate of discount on the day by multiplying the rate of the maximum discount previously acquired to this (S75). A price on the day is calculated by multiplying a goods price and a components combination price by this rate of discount on the day (S76). As mentioned above, the goods information and components combination information which were acquired, and a price on the day are displayed on the customer side display 101 (S77), and the order from a customer is received (S78). The goods information and components combination information that the order was received when there was an order, and an order date are registered into the order database 108 (S79), and processing is ended when there is no order. In addition, the decision approach of a price explained here is a mere example, may be discounted by other approaches and may determine a price.

[0028] Drawing 15 is the example of the contents of electronic mail sending to the customer who continues and has an order. This electronic mail indicates the proposal number for accessing from the

homepage according to customer to the device information set as the exchange object of the components of this moon, and an article of consumption, or the goods information used as the candidate for exchange, and the contents of warm treatment service.

[0029] Drawing 16 is an example of a screen showing the flow of the processing which orders goods using the electronic order system 205. Using the proposal number indicated by the electronic mail illustrated to drawing 15, it logs in to the newest homepage according to each customer, the device information set as the exchange object of the components of this moon and an article of consumption or the goods used as the candidate for exchange, and a discount price on the day are checked, and flow until it purchases goods is shown.

[0030] Hereafter, the goods sales method using these systems is explained. The manufacturer and selling firm treating the components with which subassembly selling business suitable as an object of this system constitutes the goods itself and its goods like a construction equipment as an example, a caterpillar, an engine, etc. are assumed. Therefore, customer information, such as a construction firm, will be managed by the customer database 103. The information on the components set which should be exchanged for the goods set database 104 with the design data of Mean Time Between Failure considered that the failure occurs for every failure, such as engine incomplete combustion and poor rotation, is managed. Moreover, the information on each part article which constitutes a components set, and the design data of life years are also doubled and managed. The failure generating date and the exchanged components combination information at the time of the operation hysteresis of the scheduled maintenance for one month, one etc. year, etc. and the failure mentioned to the above occurring are managed by maintenance / operation hysteresis database 105.

[0031] First, in case goods are maintained, the maintainer by the side of a manufacturer uses the operation information input system 201 at the time of scheduled maintenance implementation, and inputs information, such as costs which maintenance took. When the proposal stage computing system 202 is used at the time of the input of this maintenance information and maintenance is performed next time at it, accumulation maintenance costs calculate whether the threshold set up beforehand is exceeded. In exceeding a threshold, if future accumulation maintenance costs are calculated, it will register the information on goods that buy [that it will be / direction / good] the new goods itself newly, and a change is proposed in the customer proposal database 107.

[0032] Moreover, in case the proposal about the purchase of the components which constitute goods, and an article of consumption is performed, the date periodically considered that a failure and maintenance occur for every customer and goods using the proposal stage computing system 108 is calculated. A failure, the customer considered that maintenance occurs, goods and its contents of a failure which may be generated, and the components combination which should be exchanged are listed like [in this moon] in it at the latest stage. The listed contents register into the customer proposal database 107 the information on components combination that exchange is proposed, like the case of maintenance of goods.

[0033] Moreover, when an order of goods is received from a customer and sales are added up as sales performance, the judgment of a customer category and a setup are performed using the customer category setting system 203 to the customer concerned. At this time, the data number of cases registered as sales performance is calculated, and when exceeding the threshold of the count of an order received which this number of cases set up beforehand, it will be regarded as the customer who has an order continuously.

[0034] From the above result, the proposal of the goods which should be purchased to a customer using the customer proposed system 204, and recommendation components combination is carried out. In case it proposes, it attaches or indicates and the goods stored in the customer proposal database 107 and the purport the information on recommendation components combination is indicated to be by the newest homepage according to each customer are auto-sent to an electronic mail on the days one month before the date expected that a failure occurs etc. At this time, the proposal number ****(ed) for every proposal issue is indicated, and in case it logs in to an electronic order system, the purport which inputs this proposal number is indicated collectively. Moreover, based on the category set up by the customer

category setting system 203, the purport which carries out warm treatment service for the purport which carries out warm treatment service to the customer who has an order continuously from the time of an order to other customers next time is indicated. There are one-year free routine inspection service, onerous upgrade service during one year of new components, etc. as this warm treatment service for one month of goods half a year. The written example of this electronic mail was shown in drawing 15.

[0035] Using the electronic order system 205, the customer who received this proposal mail logs in to the newest homepage according to each customer, and performs the order of goods with a proposal, and recommendation components combination. The newest homepage according to each of this customer will be created for every customer and every (every proposal number) proposal. Therefore, the proposed newest information on goods and recommendation components combination is displayed in inputting a proposal number, in case a customer logs in to the electronic order system 205. Moreover, in the case of the customer who has an order continuously, the rate of discount will be calculated, and goods on the day and a components combination price will be displayed on it. The example of a screen of the flow of processing of this single string was shown as flow of a goods order [drawing 16].

[0036] It becomes possible to receive information required for a stage [need / components / to be exchanged], and it becomes unnecessary for a customer to choose the components group which should be exchanged by using the above goods selling system. The maintenance cost by new purchase can be reduced by buying new goods also to goods, before performing maintenance next time. Moreover, the trouble to the serious occurrence of accident or an operating activity can be prevented now by performing reception before the time of a failure occurring, and performing a parts replacement for information in advance. Furthermore, while urging the purchase of goods and recommendation components and being able to decrease now the occurrence of accident, and generating of the trouble to an operating activity more by carrying out operation and discount of warm treatment service to the customer who has an order continuously, a change in the other company by its company detached building of a customer etc. can be prevented.

[0037]

[Effect of the Invention] According to this invention, the burden which chooses the components for which a customer is needed from a catalog, and an article of consumption by preparing the combination of the components recommended beforehand or an article of consumption for every customer is mitigated. Moreover, by predicting the stage being needed and proposing at an early stage, the automatic proposal only of the information required for a required stage can be made, and before failure and superannuation occur, the purchase of goods, components, and an article of consumption and exchange can be proposed. On the occasion of a proposal, by the thing which classified and for which the proposal approach is changed for every customer, to the customer who has an order continuously, maintenance to the existing customer's company can be performed, and the estrangement to the other company can be protected now from its company to other customers. Moreover, a customer's purchase can be urged by enabling it to purchase goods, components, and an article of consumption by the low price, so that the rate of discount is set up and an order is placed at an early stage to the customer who has an order continuously, and it becomes possible to decrease failure generating by failure or superannuation beforehand.

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CLAIMS

[Claim(s)]

[Claim 1] Maintenance of the goods periodically supplied to the customer, and/or the hysteresis information on a failure, The step which calculates the goods, components or article of consumption which should be exchanged or filled up based on the information about the durable years and/or the time between failures of components which constitute said goods and said goods, its exchange, or a supplementation stage, The goods sales method characterized by including the step which turns to a customer the information which proposes exchange or supplementation of said goods, components, or an article of consumption, and auto-sends it by E-mail on the day on which it decided based on exchange of the calculated goods, components, or an article of consumption or a supplementation stage.

[Claim 2] Said electronic mail is a goods sales method characterized by including the step which carries out a screen display of the detailed information and the order carbon button of said proposal to the customer ID of whom the customer is notified [in / including the link information to the homepage of a proposal number and the Internet / on a goods sales method according to claim 1 and / the homepage of said Internet] beforehand in response to the input of said proposal number, and the step which receives an order from the screen concerned.

[Claim 3] The customer database which associates and manages a customer name and the information on the goods supplied to the customer, The goods set database which manages the information about the durable years and/or the time between failures of components which constitute goods and the goods concerned, Maintenance / operation information database which manages the hysteresis of the maintenance and/or failure over the goods delivered to the customer, The information on the goods periodically supplied to the customer with reference to said customer database is acquired. The goods which should be exchanged or filled up based on the information managed about the goods concerned in said goods set database and said maintenance / operation information database, and the threshold information set up beforehand, The proposal stage computing system which calculates components or an article of consumption, its exchange, or a supplementation stage, The goods selling system characterized by having the customer proposed system which turns and auto-sends to a customer the information which proposes exchange or supplementation of goods, components, or an article of consumption on the day on which it decided based on the proposal stage calculated with said proposal stage computing system.

[Claim 4] It is the goods selling system characterized by transmitting the electronic mail containing the proposal concerning [on a goods selling system according to claim 3 and / said customer proposed system] exchange or supplementation of goods, components, or an article of consumption, and a proposal number automatically to a customer.

[Claim 5] It is the goods selling system which is equipped with an electronic order system in a goods selling system according to claim 4, and is characterized by the electronic order system concerned having the homepage of the Internet which changes on the screen which receives an order of the goods proposed while showing the detailed information of said proposal, when the customer ID of whom the customer is notified beforehand, and said proposal number were inputted, components, or an article of

consumption.

[Claim 6] The selling hysteresis database which manages the selling hysteresis of the goods to a customer, components, or an article of consumption in a goods selling system according to claim 3, 4, or 5, The goods from the selling hysteresis managed in the selling hysteresis database concerned, components, It has further the customer category setting system classified into the customer who continues a customer with reference to order spacing of an article of consumption, and has an order, and the other customer. Said customer proposed system The goods selling system characterized by proposing warm treatment service to the customer who continues and has an order, and proposing the warm treatment service from the time of purchase to the other customer next time.

[Translation done.]